

# Reflight of the Stratospheric TeraHertz Observatory: STO-2 Smithsonian Astrophysical Observatory Co-I

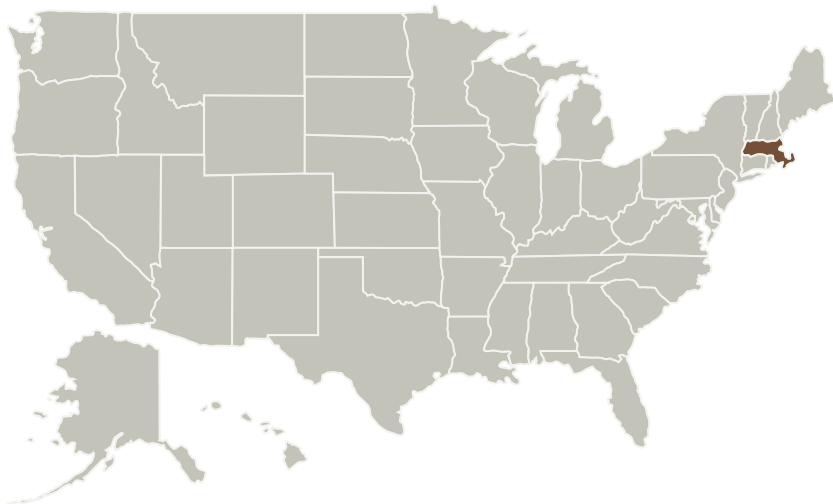
Completed Technology Project (2014 - 2016)



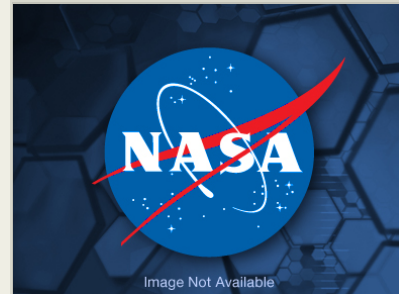
## Project Introduction

The Lead Proposal for this investigation originates from the University of Arizona, Steward Observatory under Principal Investigator Dr. Christopher K. Walker. The Smithsonian Astrophysical Observatory (SAO) is pleased to submit this subsidiary proposal for engineering and scientific collaboration on the Reflight of the Stratospheric TeraHertz Observatory (STO-2). The Institutional Principal Investigator for the SAO effort is Antony A. Stark, and scientific Co-Investigator is Brian Stalder. SAO will provide support for the refurbishment and testing of the STO at Johns Hopkins University Applied Physics Laboratory (JHU/APL). The work at SAO includes consultation on the refurbishment of the gondola, provision and modification of existing data acquisition and reduction software, and scientific collaboration on the STO Galactic Plane Survey. The STO proposal also requests support for participation in the second Long Duration Flight (LDF) from McMurdo Sound in Antarctica, and for subsequent data analysis, scientific interpretation, and publication of results.

## Primary U.S. Work Locations and Key Partners



Organizations Performing Work	Role	Type	Location
Smithsonian Astrophysical Observatory(SAO)	Supporting Organization	US Government	Cambridge, Massachusetts



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## Organizational Responsibility

### Responsible Mission Directorate:

Science Mission Directorate (SMD)

### Responsible Program:

Astrophysics Research and Analysis

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## Primary U.S. Work Locations

Massachusetts

## Project Management

### Program Director:

Michael A Garcia

### Program Manager:

Dominic J Benford

### Principal Investigator:

Antony A Stark

### Co-Investigator:

Brian Stalder

## Technology Areas

### Primary:

- TX12 Materials, Structures, Mechanical Systems, and Manufacturing
  - └ TX12.1 Materials
    - └ TX12.1.1 Lightweight Structural Materials

## Target Destination

Outside the Solar System